# EXECUTIVE SUMMARY

## PROBLEM STATEMENT

The Gold King Mine site consists of a mine adit and waste rock piles in the Cement Creek watershed. The mine historically discharged low pH, metals-laden water at a flow rate of approximately 100 gallons per minute (gpm). The water flows through a concrete channel, through a Parshall flume, through a plastic conduit, over a steep waste rock pile, and either into the subsurface (low flow), or toward North Fork Cement Creek. A pond was constructed at the base of the waste rock pile to collect water during 2014 site activities. North Fork Cement Creek flows into Cement Creek, which discharges to the Animas River in Silverton, Colorado.

On August 5, 2015, approximately 1 million gallons of acidic metals-laden water was unexpectedly released from the Gold King Mine. The mine water flowed across the site and to Cement Creek and then to the Animas River in Silverton, Colorado. Historically, EPA and the State of Colorado Division of Mining Reclamation and Safety (DRMS) had been working to control the existing flow from the Gold King Mine along with similar discharge that was emanating from the nearby Red and Bonita mine site. The project team was setting up to incorporate the flow from the Gold King Mine into the ongoing treatment of the flow from the Red and Bonita Mine when water that had been dammed in the Gold King Mine behind a collapsed section of adit broke through rock and debris.

PROJECT GOAL - The goal of the study is to determine the impact of the release on downstream waters and water users.

PROJECT AREA - The study area includes the Gold King Mine site and downstream locations potentially impacted from the Gold King release including Cement Creek and the Animas River.

PROJECT TASKS - EPA has requested that START assist to:

a. Collect samples from areas potentially affected by the release, including surface water, sediment, groundwater, and/or soil

b. Provide GPS data for sampling locations

c. Provide georeferenced site photodocumentation

d. Monitor conditions at the on-site water treatment at the Gold King Mine area

## PROJECT UPDATE

This SAP/QAPP was originally issued on 8/8/2015 for the emergency response to the Gold King Mine release. This update, Revision 1, was provided for approval on 9/11/2015 for the purposes of 1) formally incorporating the previously submitted addendums into the document and 2) formally documenting inclusion of both the original assigned TDD 0001-1508-04 and the mine treatment TDD 0001-1509-02.